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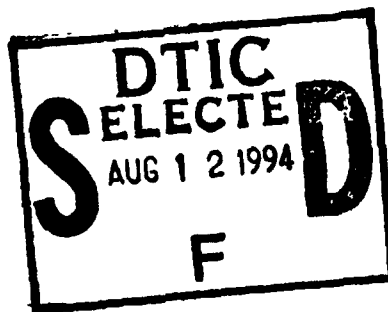
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94-104

**A Criminal Schema:
The Role of Chronicity, Race, and Socioeconomic Status
in Law Enforcement Officials' Perceptions of Others**

**C. L. Ruby and John C. Brigham
Florida State University**

ABSTRACT

This study investigated the extent to which law enforcement (LE) officials' perceptions of criminality are biased by the chronic nature of, and the racial and SES features of, their cognitive schemas of the typical criminal. Theory suggests that in general, LE officials would share a unique cognitive schema based on their specialized experiences and that the habitual use of this schema might result in an over-perception of criminality. Moreover, due to the finding that there is a disproportionate number of blacks and people of lower SES who are arrested, LE officials might perceive greater criminality in the actions of blacks and people of lower SES. One-hundred twenty undergraduate psychology students and 121 LE officers participated in this study. Part I of this study hypothesized that a chronic criminal schema used by LE would result in LE subjects perceiving criminality in ambiguous situations. Contrary to the hypothesis, laypersons were more likely to view an ambiguous situation as criminal than were LE subjects. Part II of this study hypothesized that when exposed to the actions of a black and/or lower SES criminal suspect, LE subjects would perceive more guilt, perceive more deceptiveness, place less value on exculpatory information, and place more value on incriminating information. The results supported this second hypothesis with regard to race, but not SES.

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Law enforcement (LE) officials perform a pivotal role in the criminal justice system. They are charged with the immense responsibility of interpreting peoples' actions, making judgments about those actions, and deciding whether to suspect a person of a crime, thus subjecting the person to the distressing experience of the criminal justice system. Observers have suggested that many LE officials may already have made the attribution that a person is guilty prior to arresting her/him (La Fave, 1965; Reiss, 1971). One only need consider the videotaped apprehension of Rodney King by Los Angeles police officers in 1992, and the subsequent riots, in order to appreciate the impact that LE officials' perceptions can have on others' lives. The critical nature of LE judgments, then, raises the question of whether LE officials have a unique cognitive orientation that may lead them to perceive the actions of certain people as more criminal than others.

Cognitive schema theory proposes that people use cognitive schemas in making sense of others' actions. These schemas are formed from the unique experiences with certain types of people and are activated when dealing with those people, thus increasing the efficiency at which information about others is processed (Markus & Zajonc, 1985). Nearly everyone has a schema of the typical criminal. By definition, this schema would likely contain at least two descriptive features: (1) having committed a crime and (2) being deceptive with authorities. But specific schema features would also depend on a person's unique experience with criminals. Due to the disproportionate amount of experiences that LE officials

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have with blacks and those of lower SES when enforcing the law (Bales, 1987), it could be predicted that for many LE officials, their criminal schema also contains the descriptive features of (3) black race and (4) lower SES.

Schemas can result in several biases in information processing. Ambiguous or schema-inconsistent information can be erroneously interpreted as consistent with the schema (Taylor & Crocker, 1981). Schemas can also lead to the filling of informational gaps with schema-consistent information (Hamilton, Katz, & Leirer, 1980; Taylor & Crocker, 1981). Higgins, King, and Mavin (1982) showed that schemas currently in use tend to overshadow alternative schemas when reconstructing a behavioral description of a person. A person given a schema label is likely to produce label-consistent interpretations of the person's actions (Cantor & Mischel, 1977). Looking specifically at schemas about criminals, people are more likely to perceive criminality in people labelled as criminals than if they are given other labels (Zadny & Gerard, 1974).

When viewing a situation through the biasing effects of a LE criminal schema that contains the features of black race and low SES, then, police and criminal investigators may overlook or reinterpret actions of blacks and people of low SES that do not fit the criminal schema (e. g., exculpatory information), overemphasize actions that do fit the schema (e. g., incriminating information), interpret ambiguous information as consistent with the schema (e. g., nervousness interpreted as a sign of guilt), and perceive

schema-consistent features when they are in fact absent (e. g., perceiving deceptiveness when it is not present).

Situational contexts dictate whether a particular schema is primed or activated. For instance, average citizens would not typically employ a schema of a criminal unless they had reason to believe they were watching criminal activity. However, if a schema is constantly used, as is the case with LE officials' 24-hour-a-day profession, it is highly accessible and may be called upon even in situations that do not involve criminal activities. People who are constantly exposed to a set of experiences are likely to develop cognitive constructs that are chronically employed to understand and predict their environment, rather than alternative constructs potentially more appropriate to the situation (Kelly, 1955). The ease of accessing a schema that is frequently used has been demonstrated (e. g., Bargh, Bond, Lombardi, & Tota, 1986; Higgins et al., 1982; Higgins, Bargh, & Lombardi, 1985).

A LE official's schema of a criminal can be so constantly in use that it might inappropriately be employed in ambiguous situations that are not necessarily criminal in nature. Many situations facing LE personnel are fraught with ambiguity. Much information available to an investigator or police officer is unclear, incomplete, and ambiguous. For example, during an interview, an investigator could plausibly conclude that the interviewee is nervous because he/she is guilty or because he/she is distressed about being unjustly accused of a crime. One of the main tasks of police is to decide if a person was engaging in

deviant behavior based on vague and ambiguous information (Brown, 1976). Since we know that people typically invoke chronically-primed schemas to deal with ambiguous situations, it follows that ambiguous police situations can lend themselves to the biasing effects of schemas. The ambiguity of many LE situations can facilitate the employment of a criminal schema and its potential biasing effects (Yarmey, 1990).

Despite the potential importance of cognitive biases in LE perceptions, there has been very little empirical research dealing with actual LE subjects' perceptions of people's actions. In a review of six leading journals dealing with psychology and law, Nietzel and Hartung (1993) failed to find any studies that dealt specifically with this topic during the period 1987 to 1991. The authors found 28 empirical studies of the psychology of law enforcement, but most of those dealt with clinical service for police or eyewitness identification. There were only six that could be considered related to police perceptions of suspects. Those studies dealt with criminal profiling (1) and police discretion in arrest and search procedures (5).

We found three older studies which assessed LE perception of peoples' action, but none of them manipulated the characteristics of the people being viewed, such as race and SES (Marshall & Hanssen, cited in Watson, 1974; Tickner & Poulton, 1975; Verinis & Walker, 1970). Further, none of them assessed whether LE schemas are utilized in non-criminal or ambiguous situations, or whether they are employed only when primed by a criminal context.

These older studies suggest that LE subjects over-report criminal events, make more criminal interpretation of ambiguous events, and perceive criminal events that never occurred. For instance, Verinis and Walker (1970) showed 11 black and white photographs to police and civilians. Eight of the photographs contained ambiguous details that could easily be associated with criminal scenarios (e.g., car parked in alley, man carrying gas can), but that did not have definite criminal activities portrayed. Both police and civilians recalled these details the same, but 53% of the police interpretations were criminal in nature in contrast to 30% of the civilian interpretations. Marshall and Hanssen (1974) showed a 42-second film to police and civilians in which a man approached a baby carriage, pulled down the overhead cover, and then walked off when a woman appeared from a nearby house. Police had twice as many false perceptions of the event as did civilians and 20% of the policemen actually recalled seeing the man reach into the carriage and remove the baby. Tickner and Poulton (1975) found that British police significantly over-reported thefts after viewing a four-hour film of a street scene. On the other hand, police and civilians were comparable to each other in remembering non-criminal actions in the film.

Despite the practical and methodological difficulties in getting LE officers to serve as research subjects, there are compelling theoretical as well as practical reasons to scrutinize the schema-related attributions of LE officials as compared to laypersons. Therefore, the present study analyzed the responses of

LE personnel and of college students as they related to two central research issues: (1) The tendency to utilize a criminal schema in ambiguous situations (schema chronicity), and (2) the possible existence of a unique criminal schema (containing black race and low SES features) among LE personnel. Three central hypotheses were tested.

The first hypothesis, assessed in Part 1, was that when presented with ambiguous information, a criminal schema would be employed by LE subjects more often than by laypersons, resulting in LE officials' increased criminal interpretations of individuals' ambiguous actions. As noted, past research showed a tendency for police to perceive more criminality in peoples' actions than laypersons (Marshall & Hanssen, 1974; Tickner & Poulton, 1975; Verinis & Walker, 1970). But, those studies did not control for the possible priming effects of the content or presentation of the stimulus materials. This may have activated a criminal schema in the minds of the subjects.

The second and third hypotheses dealt with perceptions of a suspect's guilt. The second hypothesis was concerned with whether the LE subjects' guilt perceptions of the black and/or low SES suspect were different than the student subjects' guilt perceptions of the same black/low SES suspect. It was hypothesized that the LE subjects would perceive more guilt for that suspect than would the student subjects.

The third hypothesis was concerned with whether subjects' guilt perceptions of the black and/or low SES suspect differed from

their guilt perceptions of the white and/or high SES suspect. It was hypothesized that the LE subjects' perceptions across the race and SES conditions would differ, whereas student subjects' perceptions across these conditions would not.

Method

Subjects

Subjects were recruited from undergraduate psychology classes at The Florida State University (FSU) and from four LE departments in Florida. A total of 120 students and 121 LE subjects participated. Of the 121 subjects in the LE sample, 11 were from Department A, 26 from Department B, 63 from Department C, and 21 from Department D. A series of ANOVAs between departments showed no relationship between the type of department and the dependent variables. Therefore, the LE subjects were considered similar enough to be compared as a whole with student subjects (Table 1). (An additional 50 subjects were recruited from a fifth LE department in Miami. However, these data were destroyed in Hurricane Andrew.) Of the LE subjects, 12% were black and 64% were white; 84% were male; and the mean age was 34.2 years. Of the student subjects, 8% were black and 70% were white; 29% were male; and the mean age was 18.3 years. The race composition within the LE and student samples were relatively similar. The categorization of black/white for LE officers and students were 12%/64% and 8%/70%, respectively. However, the gender and age differences were striking, and may have affected the outcome. The LE sample was

composed primarily of older and male subjects, whereas the student sample was made up primarily of women and younger subjects.

Insert Table 1 About Here

Procedure

All subjects were presented with a pamphlet that contained an instruction sheet, consent form, and the stimulus materials. Student subjects completed the pamphlet in a classroom setting and LE subjects completed the pamphlet at their leisure. For both parts, subjects were told they were participating in an experiment concerning social perceptions and that the scenarios were real.

Part 1: Interpretation of criminality. For Part 1, a 3 x 2 factorial design was used with level of schema priming (non-criminal context, ambiguous context, or criminal context) and group (LE or student) as the factors. Within each group, subjects were randomly assigned to read one of three dialogues between two fictitious characters. To make the three dialogues, the same basic text was used with specific parts manipulated to indicate the characters were discussing something clearly non-criminal, ambiguous, or clearly criminal. The non-criminal dialogue was clearly about two students looking for a tutor. The ambiguous dialogue was unspecific and did not contain information indicative of either criminal or non-criminal behavior on the part of the two individuals. The criminal dialogue was clearly a conversation between two individuals planning to purchase illegal drugs. None

of the dialogues contained racial or SES features of the individuals. After reading their respective dialogues, the subjects completed a questionnaire in which they responded on a seven-point Likert-type scale indicating their agreement or disagreement with five statements. Among these statements was the critical one: "They were planning to do something illegal," indicating whether or not subjects made a criminal interpretation of the dialogue. The other statements were irrelevant.

Part 2: Schematic interpretations of ambiguous information.

For Part 2, nine vignettes were developed that described the identification and questioning of a male burglary suspect named William. A 3 X 3 X 2 factorial design involved William's race (black, white, or none given), his SES (high, low, or none given), and the group membership of the subject (LE or student). Within each of the LE and student groups, subjects were randomly assigned to read one of the nine vignettes. Each vignette contained an equal number of exculpatory and incriminating bits of information. The exculpatory bits of information in the vignette were: William consented to a search of his house, a neighbor vouched for him, and William agreed to be interviewed. The incriminating bits of information in the vignette were: William had electronic tools that may have been used in the burglary, there was a complaint made against him, and William was nervous.

Subjects then completed a questionnaire that included nine questions assessing subjects' perceptions of William's guilt and other measures of criminality. Topics included subjects'

perceptions of William's guilt (both a gut-feeling perception and an evidence-based perception), William's deceptiveness with the police, and the value subjects placed on exculpatory and incriminating evidence.

A demographics questionnaire assessed seven possible covariates in the analysis: ethnic background, political orientation, political party affiliation, age, years of LE experience, educational level, and gender. Lastly, subjects were asked to estimate the percentage of burglars in Florida who fall within race and SES categories. This was done to determine what race and SES they viewed most burglars to be. By implication, this would reveal their burglar schema.

Results

Interpretations of Criminality

To test the first hypothesis, the two groups' criminality scores in the ambiguous condition of Part 1 were compared in a preplanned contrast using adjusted means derived from the ANCOVA analysis discussed below. Contrary to the hypothesis, however, students made significantly higher criminality interpretations than did LE subjects, $t(231) = 3.14$, $p < .005$, effect size = .49 (see Figure 1). Forty-six percent of the students agreed with the statement that the two individuals in the ambiguous dialogue were planning to do something illegal, whereas only 12% of the LE subjects agreed with the statement. Therefore, the first hypothesis of the study was not supported.

Education and political party affiliation were the only two of the seven demographic covariates that had a significant association with the dependent variable. Therefore, they were used in a post hoc ANCOVA (Stevens, 1986). Two LE subjects were dropped from the ANCOVA because they failed to complete the demographics questionnaire. This exploratory analysis revealed no additional significant results other than the differences expected in the overall criminality interpretations between the non-criminal and criminal conditions.

 Insert Figure 1 About Here

Schematic Interpretations of Ambiguous Information

Preplanned contrasts of guilt scores. The second hypothesis asserted that LE subjects would perceive more guilt than students would when William was black or low SES. To test this possibility, the LE and student subjects' guilt scores were compared in a preplanned contrast in the black race condition and in the low SES condition. The hypothesis was supported with regard to race but not SES. Specifically, LE officials saw the black William as more guilty than students did on both guilt measures: $t(235) = 1.68$, $p < .05$ (one-tailed), effect size = .31 for gut-feeling guilt; and $t(235) = 1.91$, $p < .05$ (one-tailed), effect size = .37 for evidence-based guilt (see Figures 2 and 3).

Insert Figures 2 and 3 About Here

The third hypothesis was not supported as, contrary to prediction, both LE subjects' and student subjects' perceptions of the black William's guilt did not significantly differ from their perceptions of the white William's guilt. Likewise, when William was of low SES, the guilt scores did not significantly differ between LE and student groups.

Post hoc exploratory analysis. Since there were no significant associations between any of the demographic covariates and the dependent variables in a multivariate analysis, a MANCOVA was not an appropriate model and a MANOVA was used in a post hoc exploratory analysis (Stevens, 1986). This analysis revealed a main effect for Group, $F(7, 217) = 4.48, p < .001$, as LE subjects perceived significantly more guilt (both gut-feeling and evidence-based guilt) than did the students, $F(1, 223) = 4.03, p < .05$, effect size = .24; and $F(1, 223) = 4.74, p < .05$, effect size = .25, respectively. Only 13% of LE subjects considered William innocent of the allegation while 32% of students did. Specific mean contrasts showed, as did the earlier a priori contrasts, that the difference between LE and student guilt scores in the black race condition was the only significant mean contrast that contributed to this overall group difference.

Follow-up univariate tests showed that LE subjects placed significantly less value on exculpatory information than did

students, $F(1, 223) = 29.41$, $p < .001$, effect size = .66. While only 20% of LE subjects considered exculpatory information valuable in determining William's innocence, 49% of students did. Specific mean contrasts showed that in both the white William and black William conditions, there were significant differences between student and LE subjects' scores, $t(235) = 4.92$, $p < .0005$ (one-tailed), effect size = 1.02 (black race condition); and $t(235) = 3.02$, $p < .005$ (one-tailed), effect size = .62 (white race condition). Finally, the students placed significantly more value on exculpatory information when William was black than when he was white, $t(235) = 2.44$, $p < .01$ (one-tailed), effect size = .50, while LE subjects did not place a different value on exculpatory evidence according to the race of the suspect (Figure 4).

 Insert Figure 4 About Here

Concerning William's deceptiveness, only 12% of LE subjects considered William truthful with the police while 38% of the students did. Thus, LE respondents perceived significantly more deceptiveness than the students did, $F(1, 223) = 11.83$, $p < .01$, effect size = .39. Specific contrasts revealed that in both the white and black William conditions, LE subjects had significantly higher deceptiveness perceptions of him than did students, $t(235) = 2.39$, $p < .01$ (one-tailed), effect size = .47 (black race condition); and $t(235) = 2.19$, $p < .05$ (one-tailed), effect size = .43 (white race condition) (Figure 5).

Insert Figure 5 About Here

Schema Features

Subjects' estimates of the race and SES characteristics of burglars were analyzed in an ANOVA. (Twelve LE subjects were dropped from this analysis because they failed to fully complete the questionnaire.) The results showed that LE subjects had a stronger tendency than laypersons to assume that the "typical" burglar is black. On average, LE subjects estimated that 54.1% of burglars in Florida are black. This was in contrast to 41.1% for college-student subjects, $F(1, 227) = 39.79, p < .0001$. Sixty percent of LE subjects estimated that at least half of all burglars in Florida were black, whereas only 32% of college students did.

The analysis of the expected ethnicity of burglars may be complicated by differences in experience that were related to regions of Florida in which subjects lived. The possibility is suggested by differences in estimates of the percent of burglars who are Hispanic. LE subjects, who in general estimated a higher percentage of black burglars than students did, estimated that significantly fewer burglars were Hispanic (13.4%) than students did (24.7%) ($F(1, 227) = 73.41, p < .001$). This may be in part due to the fact that the large majority of LE subjects (91%) were from northern Florida, which has a relatively low Hispanic population. The LE subjects from south Florida (Department A) gave a higher estimate for Hispanics (20%) than did LE subjects from

northern Florida, perhaps reflecting their greater likelihood of encountering Hispanics, burglars or regular citizens. About 21% of FSU students come from south Florida counties or Hispanic countries (FSU Budget and Analysis Department, 1992). Hence, the students' overall larger estimate for Hispanic burglars could stem from the south Florida students' more frequent exposure to Hispanics in various contexts.

The difference between student and LE subjects' portrayal of burglars' SES was also significant. Students' estimated that 59% of burglars were of low SES, while LE subjects' estimation was 67%, $F(1,227) = 12.65, p < .001$. Seventy-eight percent of the students estimated that at least half of all burglars in Florida were of low SES and 84% of LE subjects did.

Discussion

LE officials are trained to be experts in enforcing the law. It has been suggested that people who are experts in a certain dimension are better able to objectively analyze all information in situations of that dimension (Bargh & Thein, 1985; Borgida & Debono, 1989; Fiske, Kinder, & Larter, 1983). However, in using actual LE officers as subjects, this study does not fully support this contention. While part of the results indicated that LE officials may view ambiguous (those without a criminal context) events more appropriately than laypersons, the results also suggested that in analyzing a criminal situation, LE personnel may be prone to view people's actions as more criminal than laypersons.

On one hand, it appeared that LE officials (experts) were able to objectively assess a situation within their area of expertise better than laypersons. This was demonstrated in the results of Part 1, when only 12% of the LE subjects agreed that the ambiguous conversation was indicative of planning a crime, whereas 46% of students did.

But on the other hand, apparent bias in the perceptions of LE officials ^{was visible in} ~~comes from~~ Part 2, wherein LE subjects estimated significantly greater perceptions of guilt than students, particularly for black burglars. Also, for both white and black burglars, LE subjects saw a burglary suspect as significantly more deceptive with the police and placed less value on exculpatory information than did students. But, neither LE nor student subjects appeared to be influenced by the SES of a suspect. Hence, it appears that these experts are likely to view a suspect's actions as more criminal in nature than do laypersons.

The failure to support the first hypothesis may clear up some earlier questions about the accessibility or chronic application of schemas. Specifically, Verinis and Walker (1970), Marshall and Hanssen (1974), and Tickner and Poulton (1975) appeared to show that LE authorities have an easily accessible or chronic criminal schema, but these investigators did not clearly rule out the possibility that the nature of the experimental stimuli (e.g., presenting a video that showed criminal activity or warning subjects their task was to detect criminality), primed the criminal schema in their subjects. The Part 1 dialogue in the present study

differs from these previous studies because it controls for the these possible criminal priming effects by comparing responses among clearly criminal, clearly non-criminal, and ambiguous stimuli. The results showed that in most LE subjects, a criminal schema was not chronic. The Part 2 vignette was clearly criminal in nature and therefore would have primed a criminal schema in all subjects. Under these primed conditions, there was a greater perception of guilt by LE subjects than by students.

Alternatively, one might speculate that perhaps in order for the chronic nature of a schema to affect perceptions, a "personally orienting environment" is needed in which the perceiver feels personally involved and has a personal investment. For instance, a LE officer patrolling a street would be personally invested to the extent that his performance in detecting crime will not only reflect his competence, but also affect his safety. This study did not involve such an environment. The subject's task was to be a third-party observer of other people's interactions. The observers were not asked to put themselves in the situations reported in the vignettes or otherwise be personally involved. Therefore, they had no personal investment in the consequences of their perceptions. This may have prevented the effect of any existing chronic criminal schema.

Also, nearly all situations of LE officials' encounters with the public are face-to-face, as opposed to written accounts. So, in addition to the possible need for a "personally orienting environment," another possibility is that LE authorities will view

situations differently when they are presented in visual form as opposed to written form. Fiske and Taylor (1991) have emphasized the salience of visual cues in schema operation.

What effect do the characteristics of different crimes have on the biasing effects of schemas? This study looked only at a typical burglary. It may be that the arousal factor or controversy of different crimes make a difference in the biasing effect of schemas. Do typically emotional situations, such as child sexual abuse, cross-race rape, mutilation murders, and political terrorism, lend themselves more to these biases?

As already indicated, support for the second hypothesis suggested that LE officials are more likely than laypersons to interpret events as criminal in nature (but only when primed). LE officials are also more likely than laypersons to view the actions of blacks as guilty. Within a framework of cognitive schema theory, this bias can be attributed to their development and use of a schema of the typical criminal that is shaped from their unique LE experiences. The results supported the notion that the feature of black race is a more predominant part of LE officials' schema of a burglar, than of a typical student's schema. Part 2 also showed that LE officials' have significantly higher perceptions of deceptiveness and place less value on exculpatory evidence than did students.

Some important factors that could have influenced the results should be highlighted. First, students and LE subjects filled out the questionnaire under different conditions. Student subjects

completed the study in groups in a university classroom, while because of practical limitations, LE subjects were permitted to complete the pamphlet either at home or at the Department, at their convenience. This difference in administration of the study may have resulted in the subjects having different opportunities to reflect on the questions. LE subjects had a more leisurely environment and more opportunities to think about the questions. Although they were instructed not to, they may also have taken the opportunity to refer back to the vignettes to determine more appropriate responses. In addition, demand characteristics of the study may have influenced the LE subjects in responding in a socially desirable way. This seems quite plausible considering they knew they were being assessed on a task that was directly related to the competence of both themselves and their profession. Additionally, sensitivity to social desirability concerns may have led to the greater use of the "no opinion" option by LE subjects. The difference in frequency of "no opinion" responses between student and LE were especially striking for criminality interpretation scores (9% vs. 22%), evidence-based guilt scores (21% vs. 37%), gut-feeling guilt scores (8% vs. 27%), and deceptiveness scores (29% vs. 47%). Further, LE subjects' scores were more closely bunched than were students' scores, as the LE subjects' standard deviations on all measures were between .18 and .34 points lower than the entire sample standard deviations. This may be a reflection of a tendency by the LE subjects to cluster closer around a "no opinion" response more than the student

subjects did, and may indicate a general apprehension in committing to a response.

Conclusions

Although schemas are an inescapable part of our lives and are very useful in making sense of the enormous amount of information we are faced with every day, they can lead to serious biases if inappropriately employed. For example, if a LE person is convinced of the criminality of a suspect's actions, especially if due to schematic information associated with the suspect's race or SES, that authority can lose motivation to look for exculpatory evidence (Sanders, 1984). This study provided evidence that LE officials may in fact place less value on exculpatory information than do laypersons. If a tendency to overlook exculpatory evidence exists in LE officials, innocent people may be erroneously held responsible for crimes.

Sanders (1984) noted numerous criminal trials based largely on police testimony that resulted in the conviction and incarceration of accused persons who were later determined to be innocent. A recent case exemplifies this danger, and demonstrates how information which is clearly inconsistent with a suspect's guilt can nevertheless be ignored. In 1975, two black men were convicted of murdering a Los Angeles County Sheriff's deputy in 1973 and given life sentences. However, in 1992, new evidence surfaced that strongly supported their innocence. This evidence indicated that overzealous investigators involved in the case had withheld

exculpatory evidence and may have pressured prosecution witnesses to lie. Yet, despite the new evidence and the release of the suspects, the authorities still vehemently asserted that the two were guilty (Stolberg, 1992).

In defense of the objectivity of LE officials, this study provided evidence that some of the stereotypical ideas about the police are not warranted. For instance, it appeared from this study that students were more likely to interpret ambiguous information as criminal in nature than were LE officials. Also, the police (and students) did not appear to be biased in their perceptions of low SES suspects.

Although police and investigators are professed to be objective, reality forces them to side with the "prosecution team." Such an adversarial nature of LE can result in a dichotomization of events and overzealous pursuit of "criminals." Writing under the auspices of the FBI Academy's National Center for the Analysis of Violent Crime, Lanning (1989) noted such overzealousness and an increasing LE paranoia and hypervigilance with respect to satanic and occult crime, and an "either with them or against them" perspective on the issue. An exaggerated emphasis on catching the "bad guy" can increase the potential for the biasing effect of a LE schema.

Further research that employs active LE officers in the study of their perceptions can add to the understanding of the role of schemas in the LE process and can assess whether their biases result in the unjust inclusion of people into the criminal justice

system. Such an understanding can lead to changes in the focus of LE training programs that would increase the sensitivity of LE officials to these potential biases. The result can be a more objective, fair, and just application of the law.

REFERENCES

- Bales, W. D. (1987). Race and class effects on criminal justice prosecution and punishment decisions: a test of some conflict theory propositions. Ph. D. dissertation. Florida State University.
- Bargh, J. A., & Thein, R. D. (1985). Individual construct availability, person memory, and the recall judgment link: The case of information overload. Journal of Personality and Social Psychology, 49, 1129-1146.
- Bargh, J. A., Bond, R. N., Lombardi, W. J., & Tota, M. E. (1986). The additive nature of chronic and temporary sources of construct accessibility. Journal of Personality and Social Psychology, 50, 869-879.
- Borgida, E., & Debono, K. G. (1989). Social hypothesis-testing and the role of expertise. Personality and Social Psychology Bulletin, 15, 212-221.
- Brown, M. K. (1976). Politics, administration, and police discretion: the exercise of discretion by patrolmen in three urban communities. Ph. D. dissertation. UCLA.
- Cantor, N., & Mischel, W. (1977). Traits as prototypes: effects on recognition memory. Journal of Personality and Social Psychology, 35, 38-48.
- Cohen, J. (1977). Statistical power analysis for the behavioral sciences. New York: Academic Press.
- Fiske, S. T., Kinder, D. R., & Larter, W. M. (1983). The novice and the expert: knowledge-based strategies in political cognition. Journal of Experimental Social Psychology, 19, 381-400.
- Fiske, S. T., & Taylor, S. E. (1991). Social cognition (2nd ed.). New York: McGraw-Hill.
- FSU Budget and Analysis Department. (1992). The Florida State University 1991-1992 Fact Book. Tallahassee, Florida: Florida State University.
- Hamilton, D. L., Katz, L. B., & Leirer, V. O. (1980). Organizational processes in impression formation. In R. Hastie, T. M. Ostrom, E. E. Ebbesen, R. S. Wyer, D. L. Hamilton, & D. E. Carlston (Eds.), Person memory: the cognitive basis of social perception. Hillsdale, N. J.: Erlbaum
- Higgins, E. T., King, G. A., & Mavin, G. H. (1982). Individual construct accessibility and subjective impressions and recall. Journal of Personality and Social Psychology, 43, 35-47.

Higgins, E. T., Bargh, J. A., & Lombardi, W. J. (1985). The nature of priming effects on categorization. Journal of Experimental Psychology: Learning, Memory, and Cognition, 11, 59-69.

Kelley, G. A. (1955). The psychology of personal constructs. New York: Norton.

LaFave, W. R. (1965). Arrest: the decision to take a suspect into custody. Boston: Little, Brown.

Lanning, K. V. (1989). Satanic, occult, and ritualistic crime: a law enforcement perspective. National Center for the Analysis of Violent Crime, FBI Academy, Quantico, VA.

Markus, H., & Zajonc, R. B. (1985). The cognitive perspective in social psychology, in G. Lindzey and E. Aronson (Eds.), Handbook of Social Psychology, Vol 1, New York: Random House.

Nietzel, M. T., & Hartung, C. M. (1993). Psychological research on the police: An introduction to a special section on the psychology of law enforcement. Law and Human Behavior, 17, 151-155.

Reiss, A. J. (1971). The police and the public. New Haven: Yale University Press.

Sanders, R. (1984). Helping the jury evaluate eyewitness testimony: the need for additional safeguards. American Journal of Criminal Law, 12, 189-224.

Stevens, J. (1986). Applied Multivariate Statistics for Social Sciences. Hillsdale, N. J.: Erlbaum.

Stolberg, S. (1992). Judge apologizes, frees 2 men in 1973 murder. Los Angeles Times, A1, A28, A29.

Taylor, S. E., & Crocker, J. (1981). Schematic basis of social information processing. In E. T. Higgins, C. P. Herman, & M. P. Zanna (Eds.), Social cognition. the Ontario symposium on personality and social psychology, Hillsdale, N. J.: Erlbaum.

Tickner, A. H., & Poulton, E. C. (1975). Watching for people and actions. Ergonomics, 18, 35-51.

Verinis, J. S., & Walker, V. (1970). Policemen and the recall of criminal details. The Journal of Social Psychology, 81, 217-221.

Watson, P. (1974). What a witness sees depends on who he is: The selective memory. Sunday Times (London), 19 May 1974, 12.

Yarmey, D. A. (1990). Understanding police and police work. New York: New York University Press.

Zadny, J., & Gerard, H. B. (1974). Attributed intentions and informational selectivity. Journal of Experimental Social Psychology, 10, 34-52.

Table 1 Demographic Composition of Sample

	Students	Law Enforcement
Gender:		
Male	29%	84%
Female	71%	16%
Ethnicity		
Black	8%	12%
White	70%	64%
Hispanic	13%	6%
Political Orientation		
Left	41%	14%
Center	32%	22%
Right	27%	64%
Age (mean)	18.3 years	34 years
Education (BA or more)	2%	33%

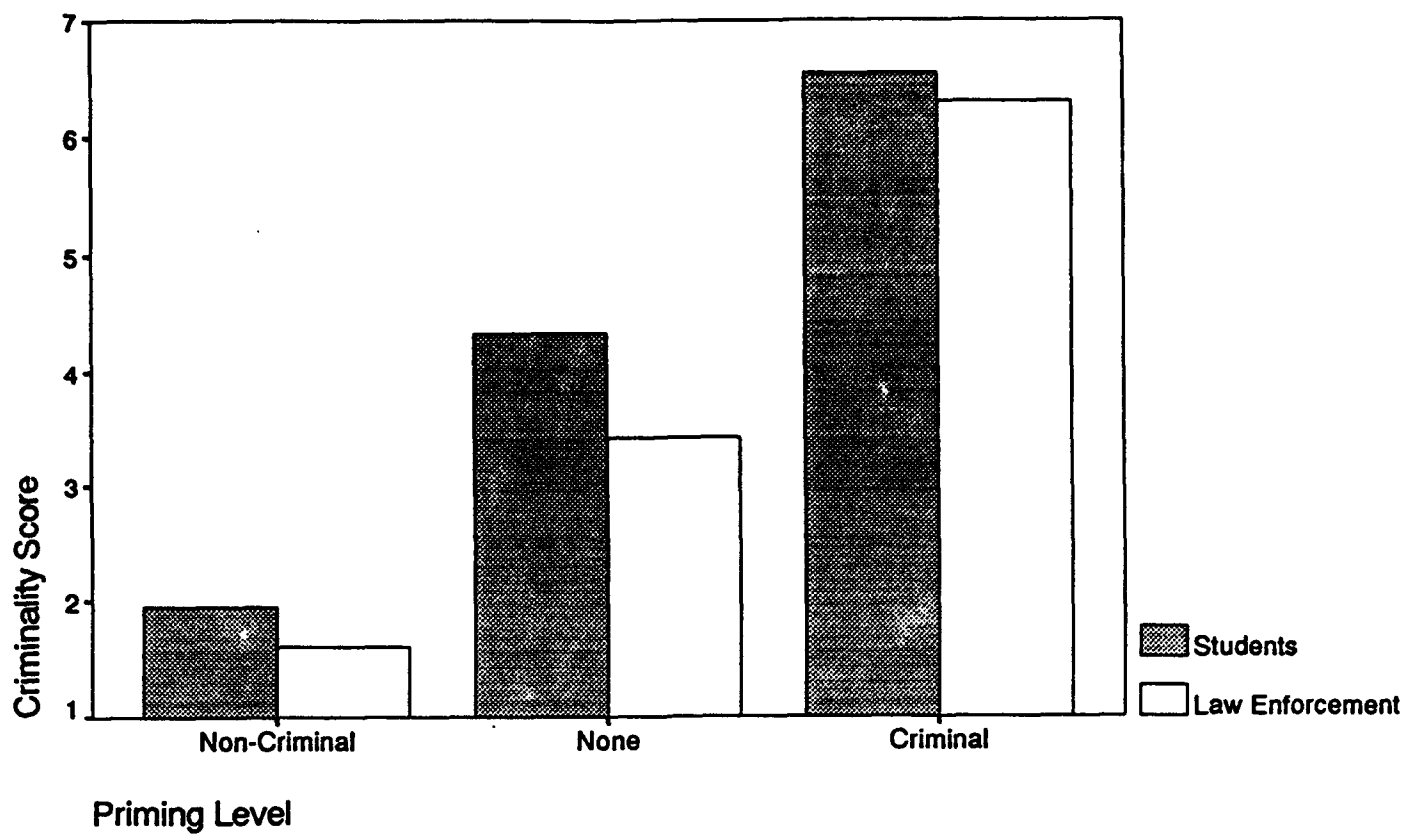


Figure 1 Criminal Interpretation Scores

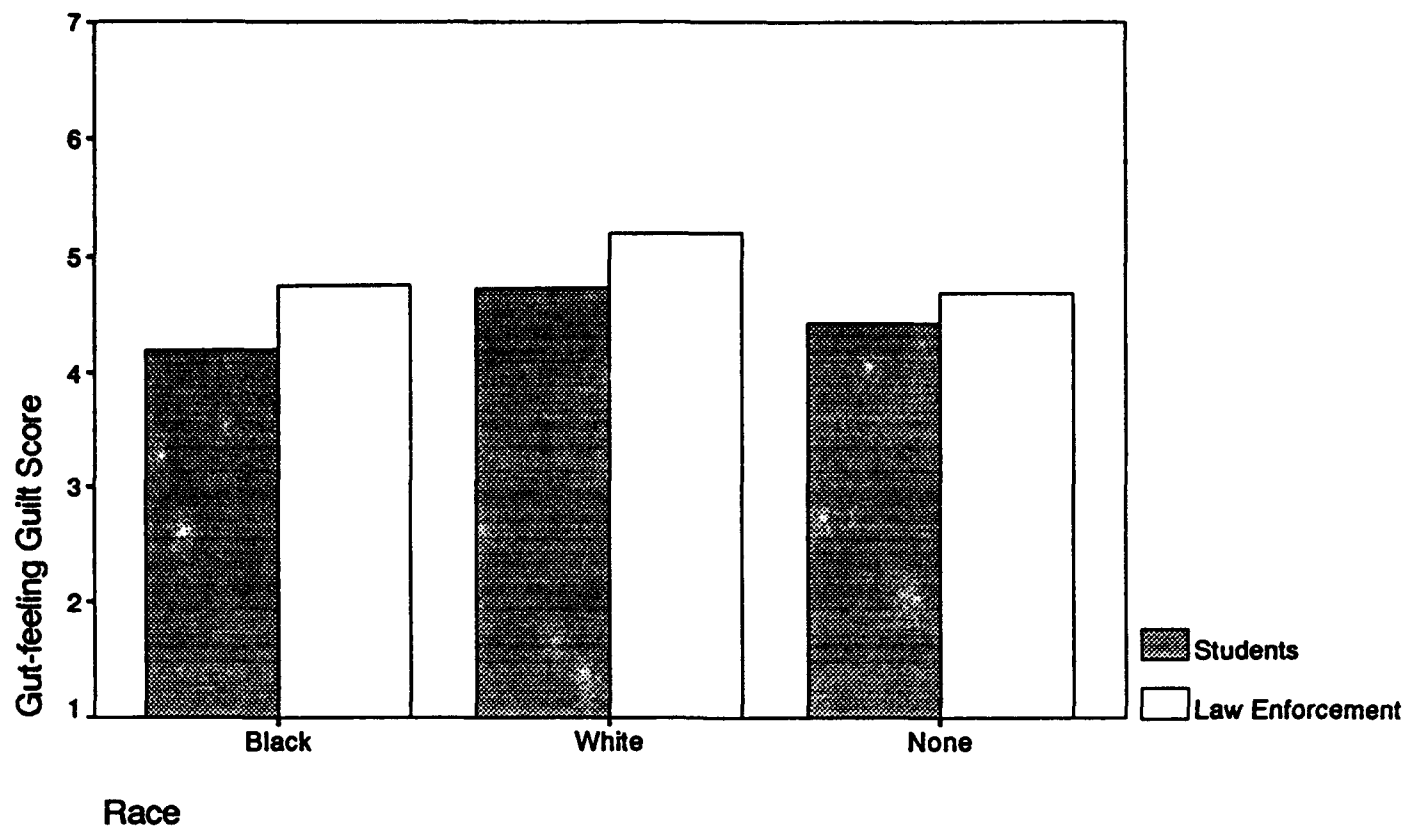


Figure 2 Gut-feeling Guilt Perceptions

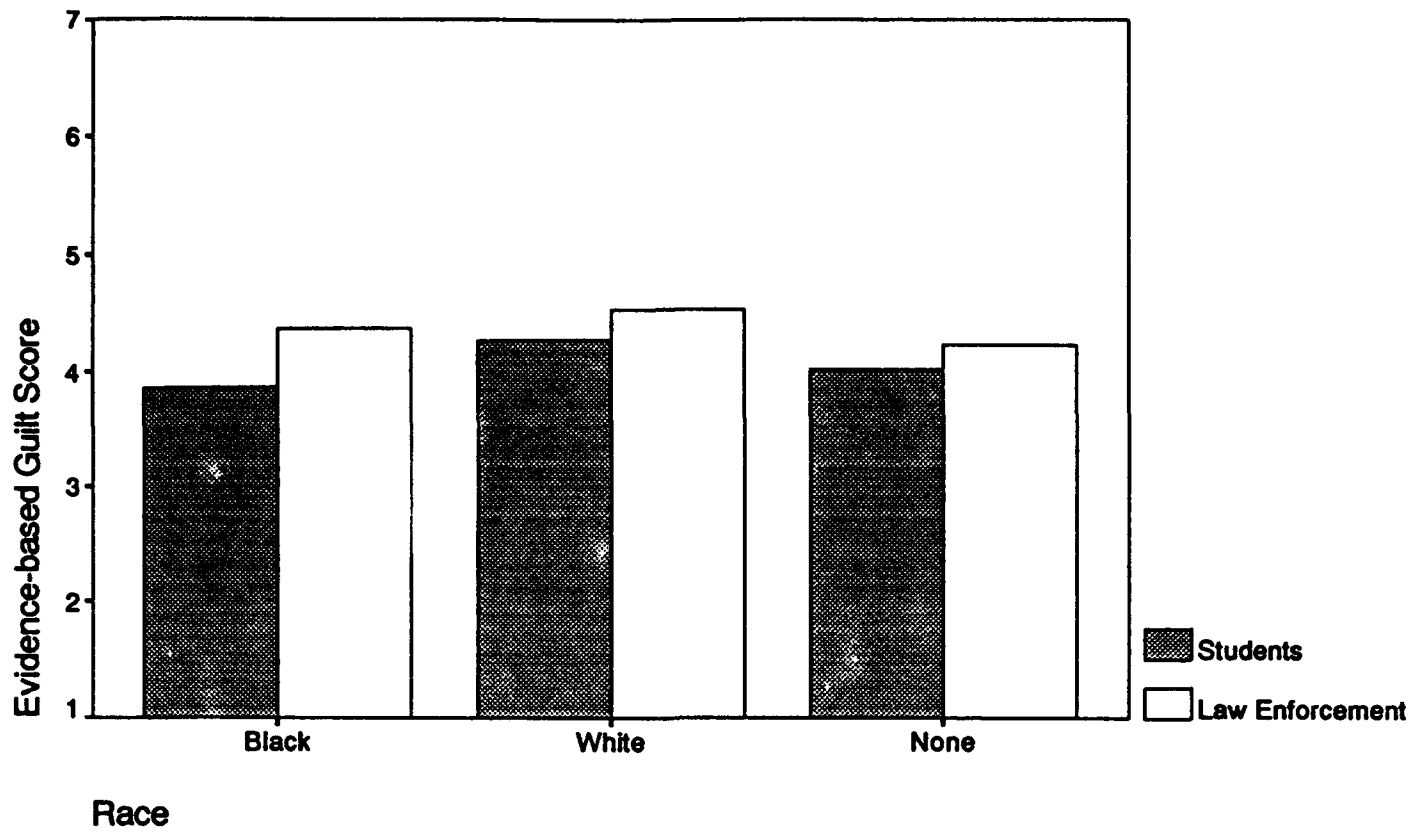


Figure 3 Evidence-based Guilt Perceptions

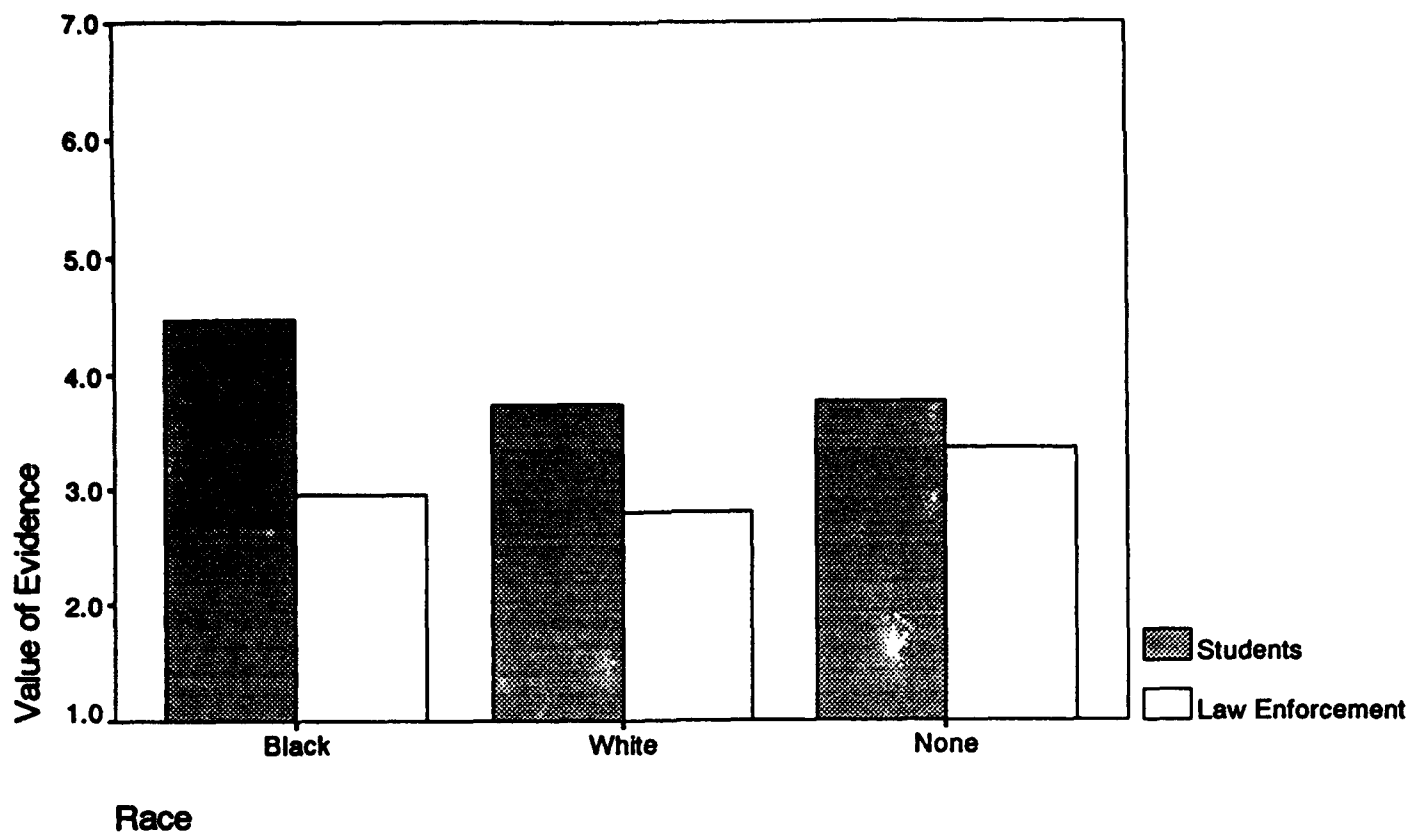


Figure 4 Value Placed on Exculpatory Evidence

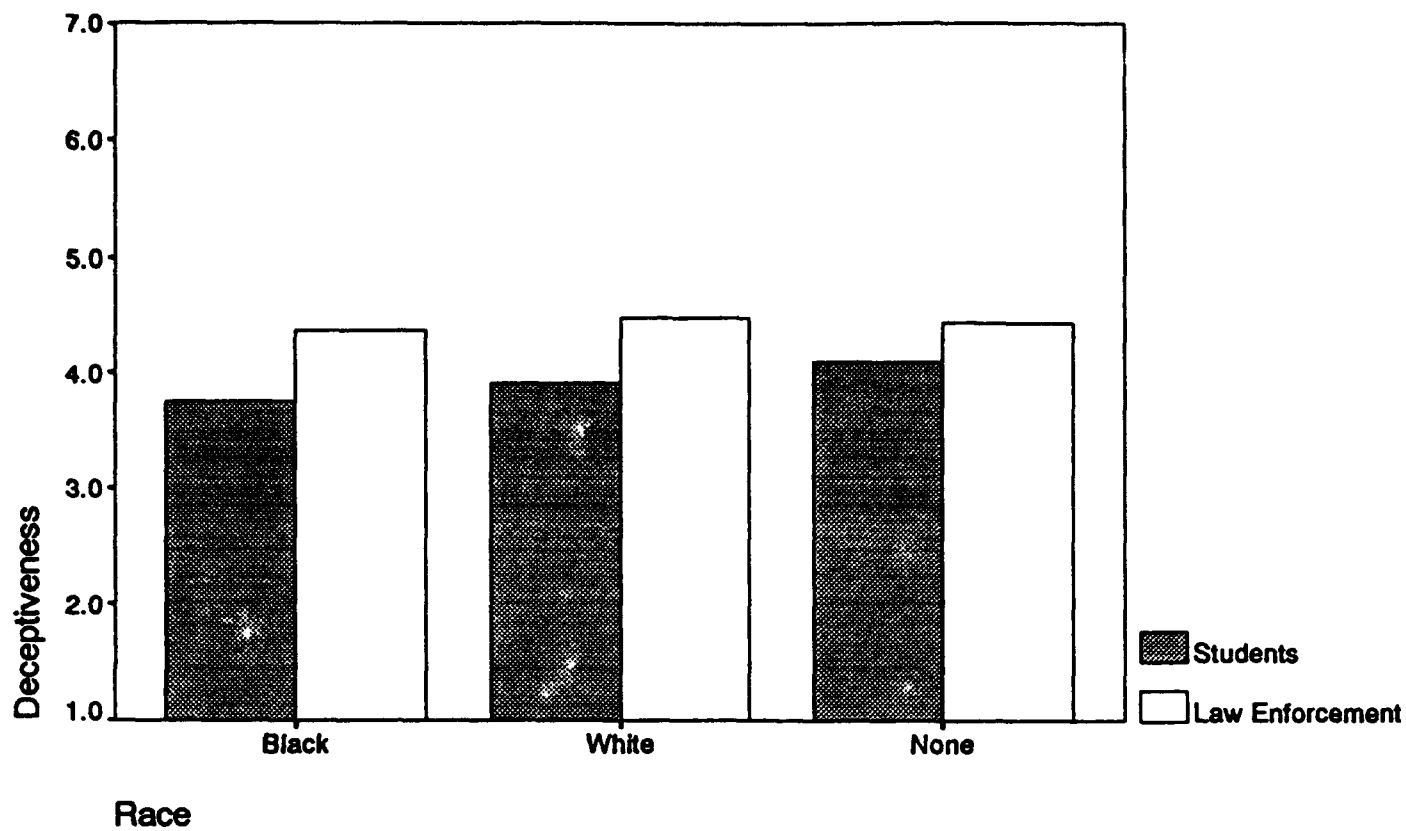


Figure 5 Deceptiveness Perceptions